# SEEDS OF CHANGE





Stories of Community Climate Action in Westport, Co. Mayo, Ireland







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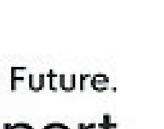
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# Introduction

Caring for land and water is never just about science. It is about people, place, and the ways communities come together to shape their futures. It is about learning from one another, building connections, and weaving new possibilities out of local knowledge and shared effort. Across Ireland and beyond, communities are finding creative ways to respond to the climate and biodiversity crises. This document gathers such stories of action from Westport (pop. 6872 as of Irish Census 2022). Westport is the third largest town in Co. Mayo in the west of Ireland, built on the Carrowbeg River which flows into the Atlantic at nearby Clew Bay.

The activities in Westport described in this document were undertaken as part of LEVERS (<a href="www.leversforclimate.eu">www.leversforclimate.eu</a>), a European Commission-funded project active in nine countries. LEVERS promotes regional and cross-sectoral collaboration on climate action, linking different kinds of organisations and working at different educational levels. In each participating country, local partners have chosen to tackle challenges that matter most in their own context. These initiatives are grounded in climate justice, place-based responses, and transdisciplinary approaches.

In Ireland, the Father Angelus Park food forest represents the local strand of LEVERS. The collaboration between Westport Tidy Towns, Food Forests Ireland (formerly the Edible Landscape Project), and the Science & Society Research Group at Trinity College Dublin shows how local action and academic research can come together to create meaningful environmental and social change in the face of socio-ecological crises.

Led by Food Forests Ireland, the design of the food forest is rooted in permaculture, biodiversity, and regenerative land use, tailored to the needs of the community and the local landscape. Westport Tidy Towns, with its strong record of community engagement and environmental stewardship, plays a vital role in mobilising volunteers, maintaining the site, and embedding the project within the town's wider sustainability vision.

Father Angelus Park is becoming more than a green space. It is a living laboratory and a community hub. The food forest provides food and habitat for pollinators, while also creating opportunities for education, participation, and connection among residents. Workshops, planting days, and shared learning events have already begun to build a strong sense of ownership and pride in the project. This collaboration is also creating new links between local and academic communities, ensuring that the knowledge generated in Westport can inform broader research and policy on community climate action. It shows how systemic design, nonformal education, and community activism can come together to create lasting, locally rooted solutions to environmental challenges.

This document tells the story of that journey in 2024 and 2025. It shows the resilience of a community, the creativity that emerges from necessity, and the seeds of new ideas already sprouting.

# Glossary of Key Terms

Sometimes the language and terms people use around the environment and sustainability are not defined or confusing. This glossary demystifies some of the language used within this document. Some of the terms in this list are defined using the <u>Climate Jargon Buster</u> a resource developed by the Department of the Taoiseach, the National Adult Literacy Agency (NALA), the Environmental Protection Agency, and Comhairle na nÓg.

#### Biodiversity

Biodiversity is the variety of life on Earth, from soil microbes to plants, animals, and whole ecosystems (like lakes and native forests). Its loss is happening at a dangerous speed and threatens the systems we all depend on: clean air and water, fertile soil, food, and protection from floods and disease (IPBES, 2019). For humans this means greater risks to food and health, and for the natural world it means species extinctions and collapsing ecosystems.

#### Citizen Science

Citizen science is the participation of the public in scientific research activities. The term describes situations when citizens actively contribute to science either with their intellectual effort, surrounding knowledge, or with their tools and resources (Hacklay et al., 2021).

#### Climate Change

Climate change refers to long-term shifts in Earth's temperature, rainfall, and weather patterns, caused mainly by human activities such as burning fossil fuels and deforestation. This also includes extreme weather events, ocean acidification and sea-level rise.

#### Climate Crisis and Climate Justice

The climate *crisis* highlights the urgency of the problems associated with climate change provided above. This disruption of Earth systems also leads to social problems such as food and water insecurity, health risks, economic disruption, mass displacement of people, and even violent conflicts. Climate justice is the idea that while everyone is affected by climate change, not everyone is affected equally. Those least responsible for creating the problem are often the ones most harmed by it. Climate justice highlights how the climate crisis worsens existing inequalities tied to race, gender, socioeconomic status, ethnicity, and other overlapping factors (Loach, 2023). It calls for fair solutions that put equity and justice at the centre of climate action.

#### Food Resilience / Food Security

Food resilience and food security mean having reliable access to enough safe, healthy, and appropriate food for everyone, even when unexpected shocks occur. It is about ensuring food systems can withstand disruptions such as extreme weather, supply chain breakdowns, or economic pressures, and still provide for people's needs (Tendell et al 2015).

#### **Greenhouse Gas Emissions**

Gases that trap heat from the Earth's surface causing warming in the lower atmosphere and slowing down loss of energy from Earth. The major greenhouse gases that cause climate change are carbon dioxide, methane and nitrous oxide.

#### Socio-ecological Crises

Crises that arise from the interconnected challenges facing societies and ecosystems, such as climate change, biodiversity loss, and inequality. The term highlights how human well-being and environmental health are deeply linked.

# Welcome to Father Angelus Park

Welcome to Father Angelus Park Food Forest, in Westport, Co. Mayo: a space for the community to gather, talk, connect and grow food together.



Image Credit: Penny McGovern

But it didn't always look like this. The area of land where the Food Forest now grows used to be an unused area of overgrown bracken and trees. Through hours of work and collaboration the Father Angelus Park Food Forest has grown into a communal space growing food and flowers, featuring a shelter and a barbeque area.

Father Angelus Park, developed as a residential area in the 1950s, has 40 houses and a central green space with benches, playing fields and trees. Along a cul-de-sac to one side of this area was a 15m x 5m plot of land (highlighted in orange in this aerial view map), which until 2024, was unused by the residents.



# Food Security in Ireland: Building Resilience Together

In Westport, and across rural Ireland, the storm known as the "Beast from the East" in 2018 left supermarket shelves empty for days. Experiences like this remain fresh in memory, highlighting how vulnerable food supply chains can be to sudden shocks. These events can trigger fear and uncertainty, but fear on its own rarely leads to action.

Research from the University College London Climate Action Unit points to this in their <u>Seven Insights from Neuroscience and Psychology</u> (Roberts et al., 2021) One insight, Fear Won't Do It (right), shows that while fear may raise awareness, people only move to action when they are offered clear, concrete, and doable solutions. Another insight, Speak to the Elephant (below), reminds us that people respond first with intuition shaped by lived experience, and only later with careful reasoning. If we want to inspire action, we must start from what people already know and feel in their everyday lives.

Seven Insights: Fear Won't Do It
Fear on its own rarely leads to
change. But fear can help motivate
action when it is paired with
solutions that feel concrete,
doable, and effective.

#### Seven Insights: Speak to the elephant

We think in two ways. The Elephant is our intuitive side, shaped by lived experience and quick reactions. The Rider is our reasoning side, slower and more deliberate. Both are part of every decision, but intuition comes first. This means climate action works best when it starts from people's lived experiences and everyday realities.

Food forests offer one such action-oriented solution. They are tangible, visible, and rooted in place. By producing food locally, creating resilient ecosystems, and offering a shared space for learning, they respond directly to the vulnerability exposed by past crises. At the same time, they give communities a hopeful, practical pathway to act together on climate and food security.



Image Credit: Penny McGovern

# What is a Food Forest?

# Insights from Food Forests Ireland: www.foodforests.ie



A food forest is a land management system where trees, shrubs and perennial plants are planted in such a way as to mimic the structure of a natural temperate woodland. This results in the formation of a sustainable and stable ecosystem.

## Why Food Forests?

Food forests can contribute to 'food systems resilience'. Global food systems are vulnerable to disruptions caused by natural disasters, political crises, health emergencies, and other associated effects due to the climate and biodiversity polycrises (Ericksen, 2008). A 'food system' recognises the multiple activities, interactions and outcomes associated with food production, exchange and consumption (Zurek et al., 2022). 'Resilience' is understood as the capacity to withstand or recover from shocks, so food systems resilience means the ability for a country's food system to maintain capacity to provide sufficient, appropriate and accessible food for all (Doherty et al., 2019). Food forests are a systemic design approach to growing since all aspects of the food forest system work together in harmony.

Food Forests Ireland's intention is not to challenge Ireland's existing food system, but to create awareness on how to supplement it. Under the strategy for future sustainable food systems, Food Vision 2030, Ireland has the goal to develop a climate neutral food system by 2050, and to restore and enhance biodiversity (Department for Agriculture, Food and the Marine, 2022). Food forests can contribute to these goals by providing food that is grown closer to people's homes.

In 2020 Ireland imported 100,000 tonnes of bananas, 75,000 tonnes of potatoes and 39,000 tonnes of onions. Ireland also imported 55,000 tonnes of oranges and mandarins in 2020 with 11,000 tonnes imported from South Africa and 14,000 tonnes from Spain (CSO, 2020). These fruits and vegetables travel large distances to make it to our plates.

While these items can't all be grown in Ireland, healthy local produce can thrive. Food Forests Ireland creates awareness through their call to action to plant food forests in schools, back gardens and vacant community areas like the one identified in Father Angelus Park.

#### Some of the benefits of food forests include:

- Biodiversity benefits: since there are no chemical inputs required and organic matter buildup;
- Climate change benefits: since carbon is stored in the undisturbed soil;
- Physical and mental health benefits: Families, schools and community groups work together in the design and creation process;
- Intergenerational Connections: Food Forests
   Ireland have been trialling an inter-generational
   Food Forest Programme connecting local
   schools and communities
- Reduced maintenance compared to more traditional forms of gardening;
- Supporting local enterprises: where possible local or heritage tree and shrub varieties are used.

## The Seven-Layered System

The key to a food forest's success is in its design which uses a layered planting system. This layered planting system can be seen in the figure below. Food Forests Ireland recognises seven layers in a forest garden which have been adapted to suit an Irish context

The Seven Layers of a Forest Garden

# 1. Canopy (Large Fruit & Nut Trees) 2. Low Tree Layer (Dwarf Fruit Trees) 3. Shrub Layer (Currants & Berries) 4. Herbaceous Layer 5. Rhizosphere (Root Crops) 6. Soil Surface (Ground Cover Crops) 7. Vertical Layer (Climbers, Vines)

The first layer is the *canopy layer*, this involves creating a protective shelter belt, a key component for a food forest in Ireland due to high levels of wind. In this layer, it is recommended that mixed native hedging be introduced.

Source: Reproduced from Krishnan et al., (2016)

The second layer is the small tree layer, this can include *apples, plums, pears, greenage, cobnuts, etc.* grown on mid and small size rootstock size depending on the available space.

The third layer is the shrub layer which requires little maintenance. Almost no labour is required in this layer once established. Examples of plants for this layer include *berries* and *currants*.

The fourth layer is the herbaceous layer which includes plants such as rosemary, chives, lavender and perennial celery.

The fifth layer is the rhizosphere or root layer. This includes plants such as carrots, radish, potato, yam, ginseng, celery, parsley, and horseradish.

The sixth layer is the soil surface or ground cover layer, this includes plants such as woodruff, alpine strawberries, chamomile, creeping thyme and sweet potato.

The seventh layer is the vertical or vine layer which includes plants such as grapes, and adapted for the Irish climate, peas, mangetout, and Caucasian spinach.

# **Future Food Forest: Initial Vision**

Community partners agreed that the vacant plot of land in Father Angelus Park would become the site of a new future food forest. The image below is the initial design shared by Pat Fahy, Westport Tidy Town's Biodiversity Officer and Food Forests Ireland. It shows the plot of land set aside for the food forest, with notes on the features planned for the area. The design offered a starting vision for how the space could evolve, and was refined with resident input as different features were suggested and added.

**Sunflowers** and raspberries will be placed along the back wall since it gives them some shelter, but lots of sun against the wall.

Wall at the back to be whitewashed, with images of bumblebees and butterflies added by a local artist. The whitewashing will reflect the sun making this ideal for a seating area here.

The left hand wall is a concrete face, ideal to grow snap dragons, a food forest plant that can grow in the wall. So it will be a living wall of food forest plants.

Top left holds a compost base for grass and a leaf mould and a wormery or wheelie bin wormery - where liquid can be put through the vegetable material to get liquid feed.

Here is a substation with an electricity cable going through it. Screen it off with posts and timbers so there could be runner beans, broad beans and a flower bed below.

Community members said they wanted root vegetables, so carrots, parsnips, beetroot and spinach could be planted here in raised beds, with some paths between.

The crab apple trees, and the shelter belt will be in the middle along with hazel and elderberry which are native trees

Initial plan shows a bird bath and a quince in this central area. Later modification led to the addition of a multilayered herb planter with paths around it.

# **Future Food Forest: Execution**

On October 12th, 2024, Deputy Michael Ring, T.D for Mayo, and former Irish Government Minister for Rural and Community Development was guest of honour at the inauguration of the Father Angelus Park Food Forest, planting the very first apple tree in the plot of land.



Deputy Michael Ring T.D. planting the first tree of the food forest.

Michael Ring is not only a local politician - he also has a personal link, being able to boast that he was the very first baby boy born in Father Angelus Park!

Community members young and old as well as visitors to the town gathered to celebrate the occasion, with residents sharing ideas on what they wanted from in their future food forest area.



Eithne Larkin (Westport Tidy Towns Chairperson) addressing attendees



The inauguration of the food forest at Father Angelus Park Image Credits (this page): Mairéad Hurley

# **Future Food Forest: Execution**

From October onwards, almost every Saturday morning, Pat Fahy held planting sessions where Father Angelus Park residents could ask questions about the food forest, offer suggestions for crops they wanted to include, and get involved in the building of the forest. A dedicated WhatsApp group was created to coordinate the efforts. New suggestions were worked into the design of the food forest as it evolved. One resident asked for a damson tree and a quince because it reminded them of their parents' garden growing up.

The food forest also used local and chemicalfree techniques to build the base layer for example seaweed from a local supplier, and local wool (see image on the right)



Nan who is 91 years old has lived at Father Angelus Park since the estate was built. When the food forest started, she gave her daughter cuttings of a gooseberry plant that has been in their family for generations asking that it be planted in the food forest. She wanted her family to be remembered and involved in the food forest.



One way the design changed was to incorporate a vegetable planters (pictured to the left) and a herb planter (pictured below). These were built by Tidy Towns volunteers and by the Father Angelus Park residents.



Image Credit: Penny McGovern

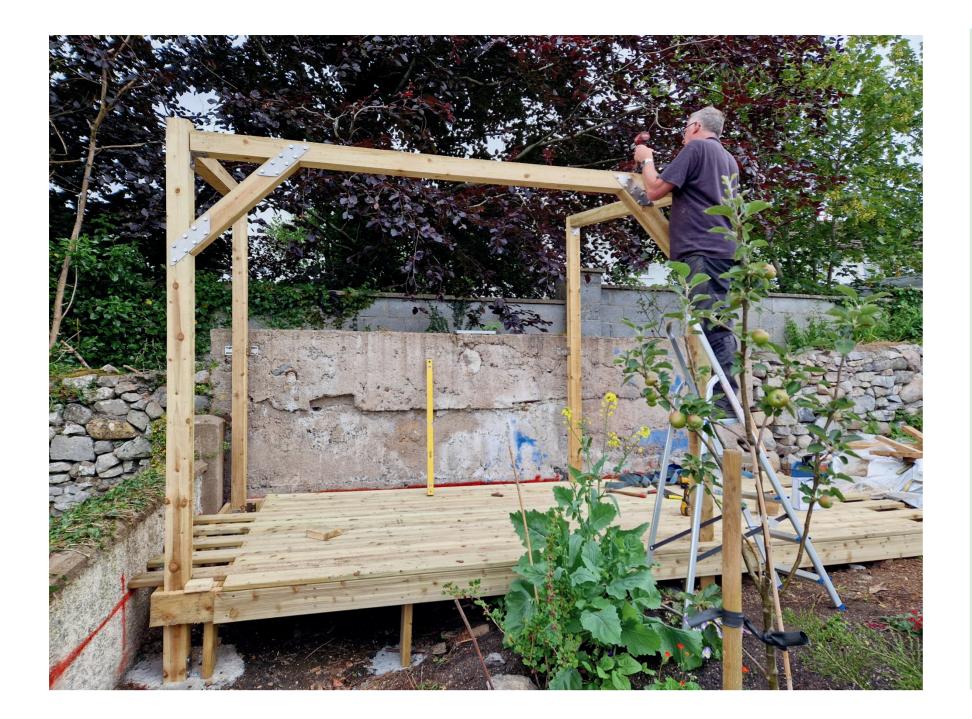
The building of the food forest was also impacted by external events. In January 2025 the record-breaking Storm Éowyn hit Ireland. This caused damage to power lines, structural damage, disruptions and cancellations to transport and caused more than 10,000 trees to fall. Around Westport, the council chipped trees that were damaged in the storm. At Father Angelus Park, residents were able to use the wood chippings (pictured to the right) in walkways.



Using the chippings for the paths was a resourceful way to make the most of the damage caused during the storm. The climate crisis is likely to cause more significant weather events such as this one, and being able to creatively reuse materials will become a valuable skill once again.

The Father Angelus Park food forest has had different levels of wider community buy-in. In addition to the weekly sessions led by Pat Fahy, another way residents became more involved was through a 'Sunflower Challenge'. The flyer below, created by one resident, was posted through letterboxes inviting residents to come to a planting evening where would each get a sunflower seed and plant this in a pot. The sunflowers were then taken home where residents tried to grow the 'best' sunflower which would be judged at a later date with the potential to win a Homeland voucher.



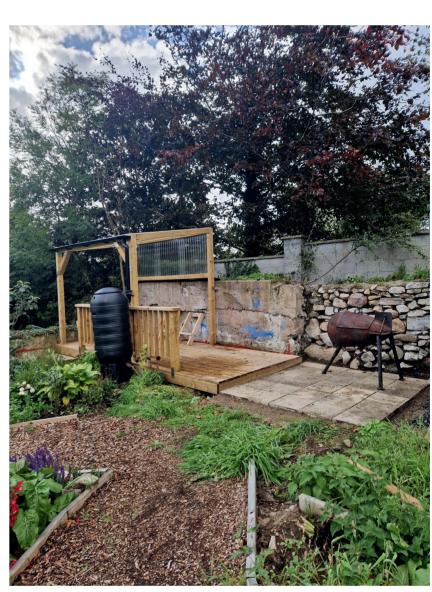


# Seven Insights: Actions drive Beliefs

We often think people need strong beliefs before they will act. But it also works the other way around: taking action helps shape what we believe and value. Small steps like planting a tree, attending a climate workshop, or building a shelter can increase people's sense of care and ownership. Over time, these actions create stronger motivation and make further action more likely.

Some residents have helped shape the food forest to suit their needs, bringing their own knowledge and skills to the work. With some digging support, John Henry built the shelter pictured on this page, designed to encourage social gatherings in the forest. Weekly planting sessions and other hands-on activities have drawn in more residents, showing how action can spark further involvement.

Another one of the Seven Insights from the Climate Action Unit is *Actions Drive Beliefs*. We often assume that giving people more knowledge and information leads to action. But the reverse is also true. Taking action, even in small ways, can build care and commitment, which then strengthens self-belief and encourages further action.



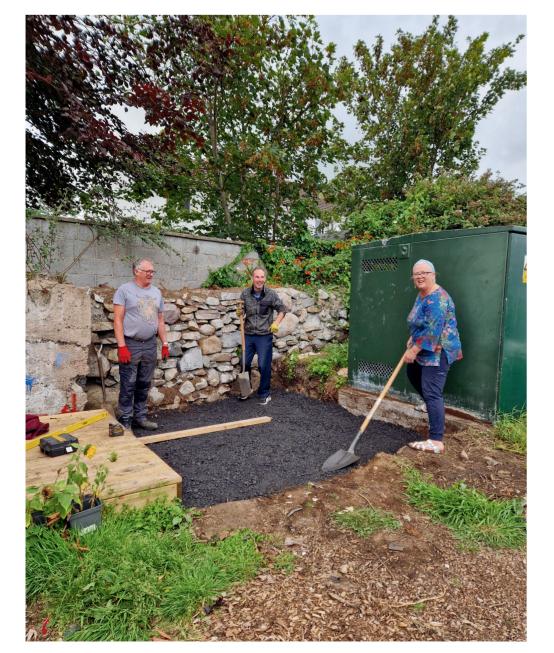


Image Credits (this page): Cathy Waddell

After the shelter was built, a barbecue area (pictured left) was added to invite even more use of the space

"Gardening at the Father Angelus Park Food Forest and meeting the residents, doing things, making progress and making memories. Youngsters engaging with the wildlife in the garden or planting sunflower seeds with their parents, both having never planted a seed before in some cases then returning months later with their cheery sunflowers, in hindsight a workshop that wasn't called a workshop may have the greatest influence of all. Big thanks to all who made all the food forest and other projects possible." - Pat Fahy, Westport Tidy Towns Biodiversity Officer



Image Credit: Penny McGovern

# Events: Food, Culture, and Climate

Alongside the planting of the food forest, a series of community events around science and climate education took place in and around Westport. These were designed to complement the practical activities on the ground and to promote dialogue on how culture, food, and science can come together for climate action.

# **RE-GENERATION:** Sustainable Food for the Ages

In November 2024, as part of Science Week Ireland, the Future Food Forest project explored regeneration through joyful, foodfocused gatherings. The aim was to highlight conscious consumption, cultural heritage, and traditional knowledge alongside science as tools for imagining and shaping a sustainable future. One highlight was a baking workshop led by expert duo The Irish Soda Bread Way, who taught traditional methods of making soda bread, scones, and butter while weaving folklore and local wisdom through their lively storytelling. Neighbours, families, and friends baked side by side in an intergenerational celebration that showed food is not only nourishment, but also memory and connection. As participants enjoyed their fresh scones, they also heard from Caithriona McCarthy of Food Forests Ireland, who spoke about the benefits of food forests, and Anita Furey of Teagasc, who described how her organisation helps local food innovators develop products through the BIA Innovator Campus in Athenry, Co. Galway.

"Even though baking is often done in our house, this event made me think more about the connections to sustainable practices and also appreciate the importance of community coming together to enjoy food" - Participant in RE-GENERATION



Image Credit: Michael McLaughlin

# **RE-GENERATION:** Sustainable Food for the Ages



Image Description (above): The Irish Soda Bread Way sharing their knowledge with workshop attendees.

Image Description (right): A wire tray of scones baked by workshop participants, handmade butter churned during the workshop, and homemade jam.

Image Description (below): Caithriona McCarthy (Food Forests Ireland) introducing young learners to the food forest produce.



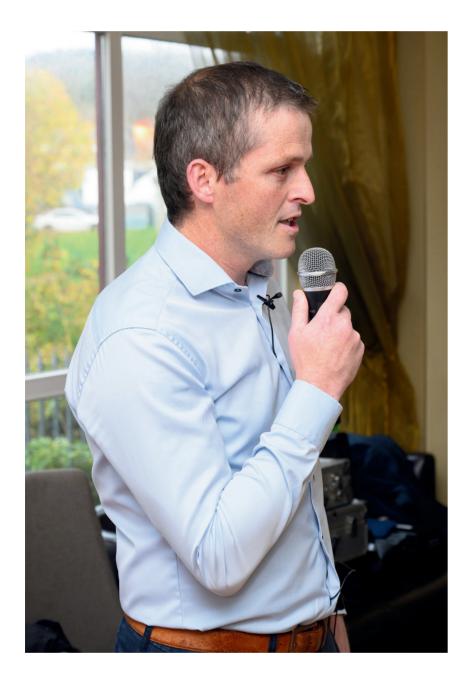


Image credits (this page): Michael McLaughlin

# **RE-GENERATION: Sustainable Food for the Ages**

Later that day, gastronomic artist Rudi-lee McCarthy and Professor Tommy Boland (School of Agriculture and Food Science, UCD) hosted a shared meal created entirely from local ingredients. Rather than promoting one "right" way of eating, the menu encouraged reflection on heritage and sustainability, showing that eating well for the planet can mean rethinking how we use what we already have, valuing local suppliers, and bridging divides between farming and non-farming communities.





The conversation at the table opened space to face difficult truths, including the insight from Professor Boland about the significant mental health pressures among young farmers due to the blame being placed on the agricultural sector for climate change in Ireland, and the societal divide that is being aggravated by media that present a black and white argument rather than showing the nuanced issue for what it really is.

"Education needs to be improved, support and community activities to promote sustainable food needs to be easily accessible to everyone. I liked the message that farmers are willing to change if they are listened to and given the support they need, people in the community will too." - Participant in RE-GENERATION

A socially engaged artist, Rudi-lee McCarthy shared his inspirations for the menu, including the land, his family heritage, and his insistence on elevating rarely-used cuts of meat sourced from a personally-known supplier, a once-common practice which is now rare.

Despite challenging topics, overall this meal celebrated creativity, land stewardship, and the power of food to bring people together.

Together, these events showed that art and science can meet at the table, sparking curiosity about our food systems while strengthening community bonds.

Alongside the planting of the food forest, they helped sow seeds of imagination for more sustainable and connected futures.



Image credits (this page): Michael McLaughlin

# **RE-GENERATION:** Sustainable Food for the Ages



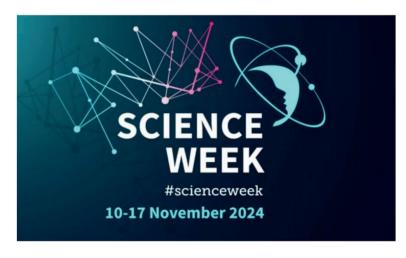
"Food was great. Speakers were excellent. I learnt a lot about the agricultural sector that I didn't know, about the soil and how it is used." -Participant in RE-GENERATION







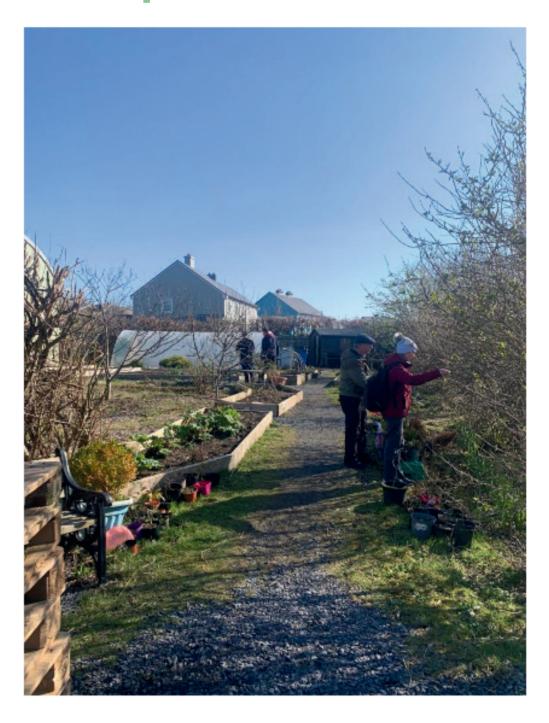
Prof Tommy Boland (UCD), Brian Larkin, John Scahill, David Whelan (One Westport), Dr Mairéad Hurley (TCD + LEVERS) and Rudi-lee McCarthy (artist) Image credits (this page): Michael McLaughlin





# **Biodiversity Talk and Composting Workshop**

Before the shelter was built at Father Angelus Park, workshops were held at the Quay Community Centre in Westport where there is an existing community garden. Horticulture students from Mayo College, Green Schools groups from Rice College and Sacred Heart school, and other interested residents attended these events. The first included two talks and demonstrations around biodiversity delivered by Sheila Murphy, the Biodiversity Officer at Mayo County Council, and Pat Fahy, Westport Tidy Towns Biodiversity Officer. Sheila introduced the group to different kinds of bat boxes to observe the nine resident bat species in Ireland. Pat showed the group some of the biodiversity to be seen at the Quay Community Garden.



The second workshop at the Quay was a composting workshop delivered by Sharon Cameron from Mayo County Council. She demonstrated the different kinds of compost that can be bought in Ireland, but also the different kinds of compost that can be made at home. She likened making compost to baking a cake, where you select the ingredients and create the perfect mix for the kind of compost you need.

# **Designing the 'Ideal Outdoor Classroom'**



A first year geography class from Rice College Boys School, led by teacher Donncha McCarrick, spent a morning with the LEVERS team from Trinity College Dublin learning about biodiversity, and imagining their 'Ideal Outdoor Classroom'. Dr Marcus Collier (Associate Professor, Botany), Dr Mairéad Hurley (Assistant Professor, Science Education) and Chelsea Beardsley (LEVERS Research Coordinator) were taken on a tour to explore the biodiversity in the school grounds with the students.

An unused patch of land on the school grounds was identified as a potential space for an outdoor classroom. Students investigated this space, mapped the biodiversity and worked together to imagine the features they would change or add to make it both a haven for biodiversity, and a place for accessible and inclusive learning for the whole school community. Their designs featured bug hotels, polytunnels and food forests, sensory gardens, crafting tables, and a dog garden for the classroom dog, Travis. One of these designs is pictured above.



**Soil Your Scarf** 

Another participatory community workshop was Soil Your Scarf delivered by Jess Leonard, Doctoral Researcher at Trinity College Dublin and Co-Director of Fibreshed Ireland. This workshop included participatory science and creative practice.

In the workshop, learners were asked to knit a small scarf with local, untreated wool whilst learning about soil microbes and the importance of soil health to ecosystems. In the second part of the workshop, learners were asked to draw an outline of their body and depict their favourite space in nature within their body map (one example pictured on the right).

"I want to learn more, how to help wildlife. Learn how to do things different so I'm helping our world to be a better place to live." - Participant in Soil Your Scarf Workshop After the workshop, the untreated scarves can be planted in soil, and then recovered months later to test the health of the soil by examining the activity of the soil microbes in the fibres under a microscope.

An insight from this workshop was the challenge teachers face in using school spaces for sustainability education.

Different members of a school community may have different priorities — for example, some value wilder spaces for teaching about biodiversity, while others prefer tidy grounds. These tensions are part of the reality of embedding sustainability in schools.





## Learning about organic gardening at the Food Forest



Once the food forest had been established and plants, fruit and vegetables had started to grow, Áine Bell from North Mayo Heritage Centre came to the Father Angelus Park food forest to provide a talk on organic gardening for the residents and wider community.

As the Father Angelus Park food forest becomes a space for the community to gather together, more talks and workshops are planned to take place. These are around biodiversity, soil health and the benefits of food forests. It is also a space where the local Green Schools groups are coming to visit to learn what can be achieved in a community space, and to be inspired to take action in their schools and homes.



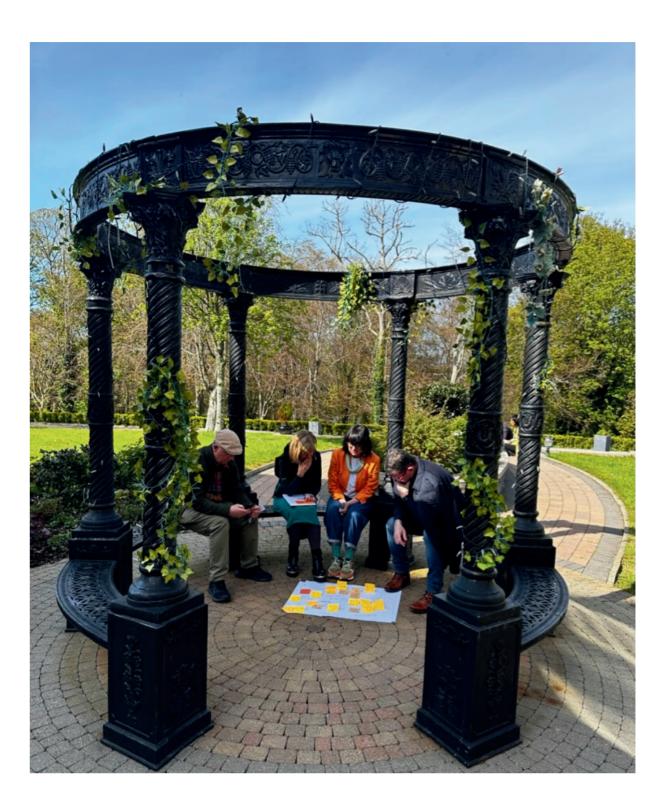
Image Credit: Penny McGovern

# Making Sense of Complex Problems Together

The climate crisis brings challenges that are often complicated and impossible to neatly 'solve'. Many different people, organisations and resources are involved, and each brings their own views, priorities and responsibilities. This can make it difficult to know where to start. The Individual Social Material (ISM) approach is useful because it helps break a big challenge into smaller pieces, showing where there may be openings for practical action.

#### What is the ISM approach?

The Individual Social Material (ISM) method was first developed for the Scottish Government (Darnton & Horne, 2013). It is a practical tool that helps communities look closely at barriers to change and possible ways to overcome them. It breaks problems down into three parts:



- Individual: people's values, skills, habits
- Social: community norms, shared meanings, networks
- Material: physical spaces, resources, rules, and systems

By mapping barriers across these three areas, a group can often spot small openings where change might be possible. These openings act like crowbars or levers that can help to shift things step by step.

The ISM works best when it is applied to a concrete, local problem, when the people involved bring local knowledge of the place. Mapping should be treated as a first step, with space to come back later and redo it once new insights or partners have come in.

#### What we did

In June 2024, community members came together online to use the ISM tool on two local challenges.

- How could a community food forest be created in Father Angelus Park?
- What does it mean for the community to care for the Carrowbeg River?

The groups brainstormed under each ISM heading, then teased out possible ways forward.



#### What happened next

From these discussions, two practical projects emerged:

- Developing the community food forest in Father Angelus Park as described in earlier sections.
- An art-science public engagement project entitled "Testing the Waters" which aimed to open up a conversation about what a 'clean' river might mean to the local community. Is a clean river one which looks pristine with little growth, or one which has very high water quality and lots of biodiversity?

For both challenges, the ISM was used to see where progress was possible, even when some barriers like strongly held values about tidiness or questions of responsibility could not be tackled directly.



#### Seven Insights: Values

'Values' help to understand what 'resonates' with people, and help to understand why certain stories and messages may lead to engagement and others don't. They are answers people give to the question "What do you care about in life?"

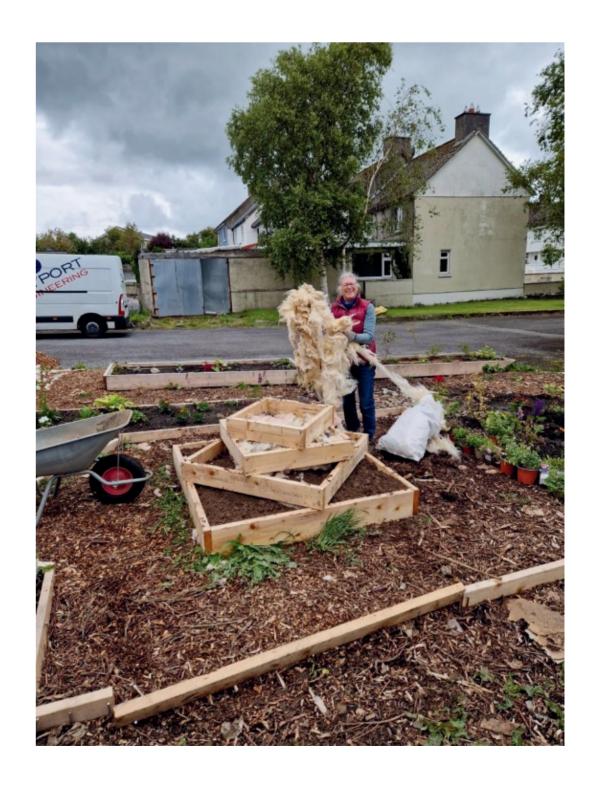
#### Our tips for others

If your community wants to start a climate action project but is not sure how, try using the ISM approach on a specific challenge. Ask:

- What individual values, skills, or habits affect this?
- What social norms or networks are involved?
- What material resources, spaces, or rules shape it?

Then, look for the levers, the small openings where something could shift. That first move might be as simple as talking to another local group, inviting in outside expertise, or telling a new story in a familiar place.

Key message: You do not need to solve the whole problem at once. Use the ISM to find the first small steps and build from there.





# **TESTING THE WATERS**

After the ISM session, a group of participants decided to look for new ways to open up conversations about the health of the Carrowbeg River and its biodiversity. It was clear that different groups in the community had different values about what "caring for the river" meant. To create a shared starting point, the team, supported by the Co-Centre for Climate + Biodiversity + Water, decided to commission a temporary artwork in the river. This artwork would act as a visible and tangible focus for dialogue, supported by a series of public talks and workshops.



Image Credit: Michael McLaughlin

The idea was that by creating something physical in the river, conversations could move away from being personal or polarised. Instead, people could gather around the artwork or at the related events, share their views, and hear facts in a way that fit the social dynamics already present in the town. The project also highlighted the bigger issue of fragmented or unclear responsibility for the river, while modelling how action can bring local and national bodies together.

From the start, the relevant authorities were contacted, including the local authority, EPA, Inland Fisheries Ireland, Waterways Ireland, the OPW and the Local Authorities Waters Programme (LAWPRO). They were given four months notice about the artwork and all supported it, partly because it was temporary and timed to avoid the spawning season. Through participatory workshops, local people were invited to share their own stories, histories and hopes for the river, which the artist then wove into the work. The resulting artwork reflected the flora and fauna discussed in workshops, including those still found in the waterway and those now absent.









Alongside the artwork, the community identified areas where more knowledge was needed to help move the conversation forward. Experts were invited to speak on topics such as:

- nature-based approaches to river management
- financing nature-based projects
- how heritage monuments may need to adapt to future climate
- river maintenance and angling
- how history and colonialism have shaped our built environment

Workshops included practical activities too - for example, with the Local Authority Waters Programme (LAWPRO), community members learned to monitor river water quality using the Citizen Science Stream Index method. In autumn 2025, the team is planning an event where other community groups will be invited to share the actions they have taken to preserve walls and heritage features along historic waterways.



Image Credit: Michael McLaughlin

Overall, the project created space for dialogue not just within the community but also with the governing bodies responsible for waterways. It allowed people to ask questions directly, and to learn who to approach when deciding on their next steps. The project has helped the community to move from talking about challenges to identifying actions they can take, informed by scientific and local knowledge, as well as the information they have gathered throughout the process.











# Citizen Science in Action

The Local Authority Waters Programme (LAWPRO) is a shared service that works on behalf of Ireland's local authorities to achieve good water quality in rivers, lakes, ground, and coastal water across the country.

A core function of the LAWPRO is to work with community groups to support the work already being done to promote better water quality, and to encourage more groups to get involved. Community involvement is key to the protection and management of local waterbodies. This is being achieved through a three-stage process: raising awareness of LAWPRO and engaging communities on local water quality issues and concerns; supporting community involvement in the stewardship of local streams, rivers, lakes, and coasts; and building capacity within local communities through knowledge funding and training.



A useful way to gain understanding and knowledge of your local waterbody is by getting involved in citizen science. The Citizen Science Stream Index (CSSI) scheme was developed to enable beginners to engage with their local rivers, increase their understanding of water quality, and form a connection with the important species that rely on good water quality. This was the approach used as part of the Testing the Waters project in the Carrowbeg River.

The LAWPRO is building networks of active communities with the knowledge, skills, and capacity to make a difference. In this way, the LAWPRO's Community Water Officers have established themselves as contact points for local communities. This is clear by the growing number of groups and champions getting involved in caring for their local water environment.

You can get in touch with your local Community Water Officer by visiting the LAWPRO's website at: <a href="mailto:lawaters.ie/team/communities-team">lawaters.ie/team/communities-team</a> - they would be delighted to hear from you and see how they can support you in protecting and restoring water quality in your area.





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# The Bigger Picture

# **Communities, Climate Action and Climate Justice**

The stories of action in this document are stories of ordinary people responding to the climate crisis. Many actions undertaken by individuals, community groups, families, churches, friends and other groups are climate actions even when they don't initally set out to be. Partnerships and community involvement are key to designing meaningful learning, and creating pathways towards effective climate responses. You don't have to be an expert on climate change and climate justice to start these actions within a community, simply have a desire to make a change, and to act collectively with others for a better future, even without knowing what the outcome will be.

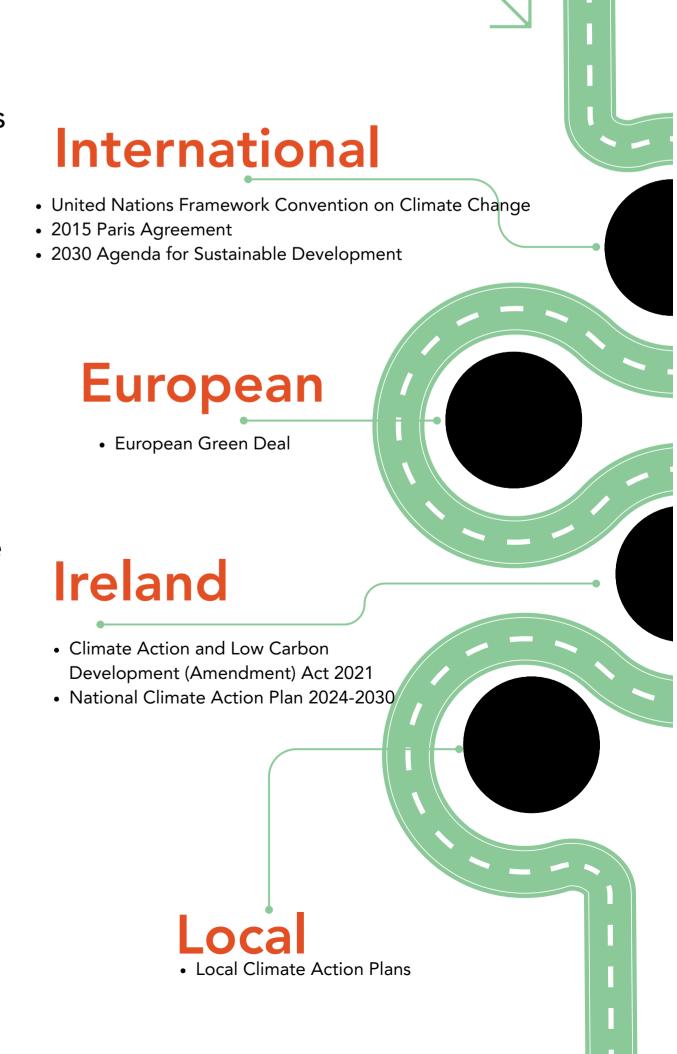
### The role of science education and citizen science

Science education and citizen science are essential components of education for sustainable futures, but they are only part of the picture. They give people tools to understand environmental challenges and to take practical action, whether through gathering data, observing nature, or learning in hands-on ways. When combined with cultural knowledge, creativity, and community experience, they help connect global issues to everyday life. For schools, the Irish Schools Sustainability Network (ISSN) <a href="www.issn.ie">www.issn.ie</a> offers valuable support for teachers, providing ideas and resources for weaving sustainability into learning alongside many other important perspectives.

# **Policy Context**

In response to the climate crisis there have been national and international policies and treaties on the actions states can take for nature, climate and biodiversity. The United Nations Framework Convention on Climate Change is the international treaty and process for negotiating policy and actions for climate change at an international level. The Paris Agreement in 2015 provided a framework for all nations to take action for climate change, and presented the international 2030 agenda for sustainable development. Under the European Green Deal, the EU is committed to a reduction of 50% carbon emissions by 2030, (compared to 2018 levels), and net-zero greenhouse gas emissions by 2050.

As a member of the EU, Ireland has been developing yearly Climate Action Plans under the Climate Action and Low Carbon Development (Amendment) Act 2021 which provides Ireland's legally binding target for a climateneutral economy by 2050.



In recognition of the role local authorities must play in climate policy and governance, local councils in Ireland are required to develop their own Climate Action Plans. The emissions used, demographics, and economic profile of each local area is unique, so these plans reflect the needs of different local councils. After a public consultation process, Mayo County Council developed their own Climate Action Plan 2024-2030. The majority of greenhouse gas emissions in Mayo come from 'Agriculture' (43%) and 'Land Use, Land Use Change and Forestry' (20%). 'Land Use, Land Use Change and Forestry' makes up a greater proportion of emissions in Mayo compared to the national emissions profile (Mayo County Council, 2024).

Each local climate action plan also includes a public consultation phase. The public consultation for Mayo found that 92% respondents were worried about climate change. Additionally, 99% of public respondents and 74% of enterprise respondents were trying to reduce their greenhouse gas emissions through various actions. The barriers to taking action or further reductions included costs, and lack of sustainable options. When asked what worried them the most, 15% of respondents answered issues with food supply and 22% loss of nature, wildlife and biodiversity and 22% answered conditions for future generations.

Designing actions that respond to the needs and concerns of the community have the most potential for changing actions, and beliefs, for collectively taking action for climate.

# Closing Reflection: Growing On

This project was not always easy. Like any new initiative, it brought different views, different priorities, and a fair share of knots to untangle. It is never possible know in advance how a project will play out, but the core of this project was about taking one small step at a time, and putting hands to the soil together, trying, learning, and seeing what might take root.

The Father Angelus Park food forest is still young. It will grow and change with the seasons, shaped by the people who care for it. Already it is more than a garden: it is a gathering place, a space for learning, and a reminder that resilience can be grown close to home.

The work ahead is not just tending plants but tending relationships, between neighbours, between generations, and between people and land. If that care continues, the story of this food forest will stretch far beyond these pages, carried in shared meals, in children's play, and in the shade of sunflowers and maturing fruit trees.

The clearest lesson might be that beauty and biodiversity, neatness and wildness, tradition and innovation, do not have to be in conflict. When groups bring their strengths together, something new can flourish. For other communities, the message is simple: start with what you have, invite others in, and let small actions open the way to bigger change.

Every patch of ground, every gathering, every seed planted can be the beginning of a thriving future.

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